

CLAIMS

1. A bearing structure comprising fibre strands of predetermined length which are provided with a hardened composite material, preferably being impregnated therewith, characterised by prefabricated, flexurally stiff components (24) which are integrated into the fibre structure (14, 16).
2. Use of a bearing structure according to claim 1 as a load-bearing part in the production of shaped bodies, in particular rotor blades, of a fibre composite structure.
3. A process for the production of a shaped body, in particular a rotor blade, of a fibre composite structure, comprising the following steps:
  - producing shells forming the outer contour of the shaped body,
  - producing bearing structures of fibre strands of predetermined length which are impregnated with a hardening composite material, and
  - transporting the bearing structure into the shells,characterised in that prefabricated flexurally stiff components (24) are integrated into the bearing structure (14, 16).
4. A process according to claim 3 characterised in that the prefabricated components (24) are produced from fibre composite materials.
5. A process according to one of claims 3 and 4 characterised in that the prefabricated components (24) of a predetermined length are used, wherein the lengths are preferably dependent on the position of installation of the components in the shaped body.
6. A process according to claim 5 characterised in that prefabricated components (24) are used, which extend in the shells (11, 12) in adapted relationship to the loading.

7. A rotor blade of a wind power installation, wherein the rotor blade is of a fibre composite structure and has a shell forming the outer contour of the rotor blade and is provided at its inside with a bearing structure which includes prefabricated, flexurally stiff components (24).

8. A wind power installation having a rotor blade according to claim 7.